#### Homes and Restaurants

Recommendations for Further Consideration



Ray Papalski Workgroup Leader November 14, 2005

### Workgroup Background

- Introductory Meeting on June 29, 2005
- Four other meetings held between July and September 2005
  - July 13: Indoor Wood Burning
  - July 27: Outdoor Wood Burning
  - August 17: Restaurants and Other Sources
  - September 14: Wrap-Up and Review

## Workgroup Goals

#### Overall Goals of Each Workgroup:

- Identify strategies to achieve emission reductions
- Prioritize reasonable and effective control measures
- Identify implementation issues and potential solutions
- Identify additional sources of data to enhance the State's database of air pollutants

# Summary Table of Strategies

	Indoor Wood Burning	Outdoor Wood Burning	Restaurants	Other sources of residential or commercial fuel combustion
A. Public education and outreach	Х	х		Х
<b>B.</b> Conduct a regional wood stove change-out program (voluntary or upon sale of home/property)	Х			
C. Create standards for wood burning equipment	Х	х		
D. Investigate changing Subchapter 2 to decrease the amount of open burning performed under permits in New Jersey		х		
E. Require low sulfur fuel oil for heating				Х
F. Homebuilders – Energy Efficiency				х
G. Investigate controls on certain restaurant operations, building particularly on the work done in California			х	
H. Address the growing number of neighbor-to-neighbor complaints from indoor and outdoor wood burning activities	Х	х		

- Adopt Similar Standards for Wood Burning Stoves and Fireplace Inserts as Adopted by Washington and Oregon (N7, N8, N10)
- Conduct a Regional Wood Stove Change-Out Program (N4) by Media Market
  - Additional rebate for NG, LPG, or propane conversion from utility companies?
  - Additional funding or rebates for low-income residences?
  - Develop range of costs for installation

 Investigate Requiring Only Natural Gas or Propane Fireplaces in Certain New Construction (N1b –N3)

- All new construction or only developments over a certain size?
- Propane or LPG for areas where gas supply not available?

- At the Time of Home Sale, Require the Change-Out of Wood Burning Units that Do Not Meet Current USEPA Standards (i.e., Units Built Prior to 1992) or Require a Home Inspection of the Wood Burning Unit (N6)
  - Voluntary program with buyer/seller discretion and real estate agent involvement?
  - Mandatory program?

 Cross-reference USEPA / NJDEP Emission Standards for Wood Stoves, Fireplace Inserts, and Wood Burning Boilers in NJDCA's Uniform Construction Codes

Require Proper Training for Installers (N8 and N9)

- Increase Regulation of Outdoor Wood Burning Activities:
  - Allow Local and County Governments the ability to regulate and enforce outdoor wood burning in their communities (B8 – 12, O15) through the Air Pollution Control Act (or other?)
  - Regulate outdoor wood boilers (O12 O15)
  - Pass legislation to require that outdoor wood burning can occur only at a certain minimum distance from the property line and set a minimum stack height (O14)
  - Ensure only dry, seasoned wood is allowed to be burned

- Investigate Changing New Jersey's Open Burning Regulation to Restrict the Types of Burning that can be Conducted by Permit under Subchapter 2 (O1)
  - Prohibit open burning on days of forecast unhealthful air quality (O2, O7)
  - Require the removal of items that can be commercially sold or recycled prior to conducting an open burn (O3)
  - Limit the issuance of open burning permits for infested plant-life (N.J.A.C. 7:27-2.5), herbaceous plant-life and hedgerows (N.J.A.C. 7:27-2.9), orchard prunings and cullings (N.J.A.C. 7:27-2.10), and land clearing (N.J.A.C. 7:27-2.11) (O4, O5, O6)
  - Limit the number of open burning permits issued for a given time period and location (O7)

- Subchapter 2 Changes (cont.)
  - Increase the fees and fines collected for open burning (O8)
  - Ensure that only farmers (i.e.; farmland assessed properties) can get permits for some of the Subchapter 2 categories like orchard prunings and cullings
  - Prevent open burning of mature trees

#### Restaurants

 Consider Adoption of Emission Standards Similar to California's Standards for Chain-Driven Charbroilers and Other Operations (R2, R3)

 Consider through a Future Workgroup Effort Other Sources such as Deep Fat Fryers and Meat Broiling or Charbroiling (Other than Chain-driven)

#### Low Sulfur #2 Fuel Oil

- Regional Lower Sulfur Heating Oil (Z1)
  - Phase-in over time (500 to 15 ppm)?
  - Timing considerations?
  - Apply to all users of #2 fuel?
- Lower the Sulfur Content of #4 and #6
   Fuel Oil (Crossover Issue)
- Require #6 Fuel Oil Users to Change to Number #4 Fuel Oil (Crossover Issue)

### Energy Efficiency Standards for New Homes and New Construction

- Require Homebuilders Offer the Homeowner the Option of Constructing their New Home with Energy Conservation or Clean Energy Features prior to Construction (Z5, Z6)
  - Require all new construction to install only Energy Star rated appliances
  - Require solar panels, heat pumps, Energy Star homes, etc.
  - The above can be implemented by:
    - A voluntary approach with a homeowner waiver possible
    - A mandatory approach when no homeowner is identified or when a certain number of houses are built (e.g.; 5 or 10)
    - Requiring a certain percent of new housing construction to have Energy Conservation or Clean Energy features

#### Energy Efficiency Standards for New Homes and New Construction

- Investigate Increasing the List of Energy Star Rated Appliances (Z9)
- Continue or Expand Funding of the Rebates for Construction of Solar Panels or Other Energy Saving Devices (Z2, Z7)
- Mandate Clean Energy and Conservation Features for New Commercial and Industrial Buildings (Z8)

#### Energy Efficiency Standards for New Homes and New Construction

 Mandate Clean Energy and Conservation Features to a Certain Percent (or All?)
 New Low Income Housing

(and/or)

 Increase the Rebate/Funding (to 100%?) for Low Income Homes for Solar Panels or Other Energy Saving Devices.

#### Communication

- Develop Brochures and Handouts to be Distributed with any Purchase of Wood Burning Equipment Sold in the State (B2)
- Develop Brochures and Handouts to be Distributed by Real-Estate Agents prior to the Sale of any Home Containing a Wood Burning Appliance (B2, N6)
- Develop Television and Newspaper Ads, Brochures, Fact Sheets, Pamphlets, or Other Handouts to be Distributed with the Wood Stove and Fireplace Insert Change-Out Program (B2, N4)

#### Communication

 An Education and Outreach Effort Using Traditional and Non-Traditional Avenues of Communication Should Be Explored (B3) to Limit Activity on Poor Air Quality Days and Disseminate Information to the Public

 Increase Efforts to Inform the Public of the Availability of the Home Energy Rebate Program and Financial Incentives (Z2)

# Prioritized Strategies

	Indoor Wood Burning	Outdoor Wood Burning	Restaurants	Other sources of residential or commercial fuel combustion
<ul><li>1A. Create standards for wood stoves and fireplace inserts</li><li>1B. Conduct a regional wood stove change-out program</li></ul>	Х			
2. Require low sulfur fuel oil for heating				Х
<ul> <li>3. Energy Efficiency &amp; Renewable Energy</li> <li>A. Require homebuilders to offer the homeowner the option of constructing their new home with energy conservation or clean energy features prior to construction</li> <li>B. Require a certain percentage of new construction to contain energy efficiency measures</li> <li>C. Mandate the addition of clean energy and conservation features for new commercial and industrial buildings</li> </ul>				X
<b>4.</b> Implement and/or investigate a statewide education and outreach program that addresses the source categories in the workgroup, particularly indoor and outdoor wood burning, homeowner and business owner fuel consumption, and energy efficiency and renewable energy (e.g., for 1, 2, 3, 6, and 7, include an education component)	Х	Х		Х
5. Investigate controls on certain restaurant operations, building particularly on the work done in California			Х	
<b>6.</b> Investigate changing Subchapter 2 to decrease the amount of open burning performed under permits in New Jersey		х		
7. Address the growing number of neighbor-to-neighbor complaints from indoor and outdoor wood burning activities	Х	х		

#### State Team Members

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